I CLAIM

1. A method for reducing iDCT execution time, said method comprising the steps of:

a) examining the coefficients of a DCT block to determine the position of the EOB coefficient;

b) selecting an iDCT algorithm from the set consisting of: iDCT Normal, iDCT_high, iDCT_low, iDCT_AC and iDCT_DC; said algorithm determined by said EOB coefficient; and

c) executing said iDCT algorithm.

2. The method of claim 1, wherein said iDCT_high algorithm available to said method is determined by creating an EOB histogram of the first B-frame of a shot.

3. The method of claim 1, wherein said iDCT_low algorithm available to said method is determined by creating an EOB histogram of the first B-frame of a shot.

4. A system for reducing iDCT execution time, said system comprising:

a) determination means for determining the position of an EOB coefficient in a DCT block;

b) selection means for selecting an iDCT algorithm based upon the position of said EOB; and

c) execution means for executing said iDCT algorithm.

5. The system of claim 4, wherein said iDCT algorithm is determined by creating an EOB histogram of the first B-frame of a shot.

6. A computer readable medium containing instructions for reducing iDCT execution time, said instructions performing the steps of:

a) examining the coefficients of a DCT block to determine the position of the EOB coefficient;

b) selecting an iDCT algorithm from the set consisting of: iDCT Normal, iDCT_high, iDCT_low, iDCT_AC and iDCT_DC; said algorithm determined by said EOB coefficient; and

c) executing said iDCT algorithm.

7. The method of claim 2 wherein said iDCT_high algorithm is based upon an EOB coefficient of 39 or 40.

8. The method of claim 3 wherein said iDCT_low algorithm is based upon an EOB coefficient of 14 or 25.

9. The medium of claim 6 wherein said iDCT_high algorithm is based upon an EOB coefficient of 39 or 40.

10. The medium of claim 6 wherein said iDCT_low algorithm is based upon an EOB coefficient of 14 or 25.

11. A system for reducing iDCT execution time, said system comprising:

a) a plurality of iDCT algorithms;

b) a switch for selecting a selected algorithm from said plurality of algorithms; and

c) a computer processor for executing said selected algorithm.

12. The system of claim 11 wherein said switch accepts as input:

a) a block of DCT coefficients;

b) an EOB address; and

c) a picture type rate.

13. The system of claim 11 wherein said plurality of iDCT algorithms comprises:

iDCT_Normal, iDCT_high, iDCT_low, iDCT_AC and iDCT_DC

14. The system of claim 13 wherein said iDCT_high algorithm is selected based on an EOB value of 39 or 50.

15. The system of claim 13, wherein said iDCT_low algorithm is selected based upon an EOB value of 14 or 25.

16. The system of claim 13 wherein said iDCT_low and iDCT_high algorithms are determined based upon an EOB histogram of the first B-Frame of a shot.